

Patent Abstracts of Japan

PUBLICATION NUMBER : 02194040
PUBLICATION DATE : 31-07-90
APPLICATION DATE : 24-01-89
APPLICATION NUMBER : 01013137



APPLICANT : ASAHI CHEM IND CO LTD;

INVENTOR : TAKAHASHI YASUSHI;

INT.CL. : C08K 3/08 C08K 3/08 C08K 3/08 H01B 1/22

TITLE : CONDUCTIVE RESIN COMPOSITION

ABSTRACT : PURPOSE: To obtain a resin composition which is inexpensive, can keep its excellent conductivity for a long time and does not adversely affect a wiring board by adding a copper powder specified in a mean particle diameter and an aspect ratio to an electron beam-curing resin.

CONSTITUTION: A conductive resin composition prepared by adding 100-900 pts.wt. copper powder having a mean particle diameter of 0.1-20 μ m and an aspect ratio of 0.2-0.005 to 100 pts.wt. electron beam-curing resin. As the electron beam-curing resin used, an epoxy acrylate resin formed by using a bisphenol A epoxy resin as a starting material is particularly desirable. With respect to the MW of the electron beam-curing resin, a higher MW is better than a lower MW since the conductivity is increased. This MW is desirably 1000-50000. The copper used can hardly give high conductivity when it has a mean particle diameter $\leq 0.1\mu\text{m}$ or $\geq 20\mu\text{m}$, and it cannot give high conductivity when its aspect ratio is 0.2 or above. The appearance and surface smoothness are markedly lowered when the aspect ratio is 0.005 or below.

COPYRIGHT: (C)1990,JPO&Japio